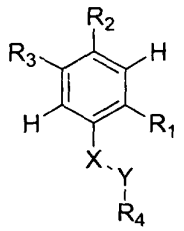
**What is claimed is:**

1. A compound of the formula



or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

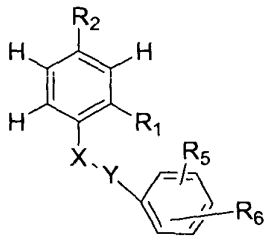
$R_1$ is –HET$^1$, –CO-HET$^1$, or –NH-S(O)$_2$-Q$^1$, the HET$^1$ being an optionally substituted HET$^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

$R_2$ is an electron withdrawing group; and

$R_4$ is an optionally substituted aryl provided that the aryl is not simultaneously substituted with a sulfonamide and a urea or thiourea, and further provided that the aryl is not solely substituted at the ortho-position relative to Y, or $R_4$ is an optionally substituted HET$^2$.

2. The compound of claim 1 having the formula II



II

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

$R_1$ is $-HET^1$, $-CO-HET^1$, or $-NH-S(O)_2-Q^1$, the $HET^1$ being an optionally substituted $HET^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

$R_2$ is an electron withdrawing group;

$R_5$ is $-(CH_2)_k-S(O)_i-R_7$, $-NH-SO_2-R_7$, $-(CH_2)_k-W-R_8$, $-NH-(CZ_1)-R_8$, $-NH-(CZ_1)-NR_8$, substituted aryl, substituted $C_{1-4}$alkyl, or substituted $C_{1-4}$alkenyl;

$R_6$ is selected from H, halo, $HET^2$, -CN, $NH_2$, $NO_2$, alkyl, substituted alkyl, alkoxy, substituted alkoxy, $-NH-CO-HET^2$, and -NH-CO-aryl;

$R_7$ is selected from alkyl, substituted alkyl, aryl, substituted aryl, $-N(Q_{15})_2$, $HET^2$, and substituted HET;

$R_8$ is H, alkyl, substituted alkyl, aryl, substituted aryl, $HET^2$, substituted $HET^2$, cycloalkyl, substituted cycloalkyl;

Each $Q_{15}$ is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, $-OQ_{16}$, $-SQ_{16}$, $-S(O)_2Q_{16}$, $-S(O)Q_{16}$, $-OS(O)_2Q_{16}$, $-C(=NQ_{16})Q_{16}$, $-S(O)_2-N=S(O)(Q_{16})_2$, $-S(O)_2-N=S(Q_{16})_2$, $-SC(O)Q_{16}$, $-NQ_{16}Q_{16}$, $-C(O)Q_{16}$, $-C(S)Q_{16}$, $-C(O)OQ_{16}$, $-OC(O)Q_{16}$, $-C(O)NQ_{16}Q_{16}$, $-C(S)NQ_{16}Q_{16}$, $-C(O)C(Q_{16})_2OC(O)Q_{16}$, -CN, $-NQ_{16}C(O)Q_{16}$, $-NQ_{16}C(S)Q_{16}$, $-NQ_{16}C(O)NQ_{16}Q_{16}$, $-NQ_{16}C(S)NQ_{16}Q_{16}$, $-S(O)_2NQ_{16}Q_{16}$, $-NQ_{16}S(O)_2Q_{16}$, $-NQ_{16}S(O)Q_{16}$, $-NQ_{16}SQ_{16}$, $-NO_2$, and $-SNQ_{16}Q_{16}$. The alkyl, cycloalkyl, and cycloalkenyl being furher optionally substituted with =O or =S;

Each $Q_{16}$ is independently selected from -H, alkyl, and cycloalkyl, the alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, $-(CZ_2)-$, or $-(CHZ_3)-$;

$Z_1$ is O;

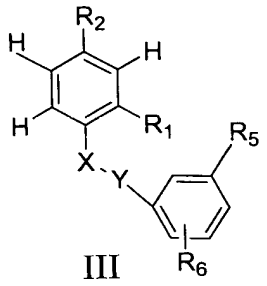
$Z_2$ is =O, =S , =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$ is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

3. The compound of claim 1 having the formula III



III

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

$R_1$ is –HET$^1$, –CO-HET$^1$, or –NH-S(O)$_2$-Q$^1$, the HET$^1$ being an optionally substituted HET$^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

$R_2$ is an electron withdrawing group;

$R_5$ is –$(CH_2)_k$-S(O)$_i$-$R_7$, -NH-$SO_2$-$R_7$, -$(CH_2)_k$-W-$R_8$, -NH-$(CZ_1)$-$R_8$, -NH-$(CZ_1)$-$NR_8$, substituted aryl, substituted $C_{1-4}$alkyl, or substituted $C_{1-4}$alkenyl;

$R_6$ is selected from H, halo, HET$^2$, -CN, $NH_2$, $NO_2$, alkyl, substituted alkyl, alkoxy, substituted alkoxy, -NH-CO-HET$^2$, and -NH-CO-aryl;

$R_7$ is selected from alkyl, substituted alkyl, aryl, substituted aryl, –N$(Q_{15})_2$, HET$^2$, and substituted HET$^2$;

$R_8$ is H, alkyl, substituted alkyl, aryl, substituted aryl, HET$^2$, substituted HET$^2$, cycloalkyl, substituted cycloalkyl;

Each $Q_{15}$ is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, -$OQ_{16}$, -$SQ_{16}$, -S(O)$_2$$Q_{16}$, -S(O)$Q_{16}$, -OS(O)$_2$$Q_{16}$, -C(=N$Q_{16}$)$Q_{16}$, -S(O)$_2$-N=S(O)$(Q_{16})_2$, -S(O)$_2$-N=S$(Q_{16})_2$, -SC(O)$Q_{16}$, -N$Q_{16}$$Q_{16}$, -C(O)$Q_{16}$, -C(S)$Q_{16}$, -C(O)O$Q_{16}$, -OC(O)$Q_{16}$, -C(O)N$Q_{16}$$Q_{16}$, -C(S)N$Q_{16}$$Q_{16}$, -C(O)C$(Q_{16})_2$OC(O)$Q_{16}$, -CN, -N$Q_{16}$C(O)$Q_{16}$, -N$Q_{16}$C(S)$Q_{16}$, -N$Q_{16}$C(O)N$Q_{16}$$Q_{16}$, -N$Q_{16}$C(S)N$Q_{16}$$Q_{16}$, -S(O)$_2$N$Q_{16}$$Q_{16}$, -N$Q_{16}$S(O)$_2$$Q_{16}$, -N$Q_{16}$S(O)$Q_{16}$, -N$Q_{16}$S$Q_{16}$, -

$NO_2$, and $-SNQ_{16}Q_{16}$. The alkyl, cycloalkyl, and cycloalkenyl being furher optionally substituted with =O or =S;

Each $Q_{16}$ is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, $-(CZ_2)-$, or $-(CHZ_3)-$;

$Z_1$ is O;

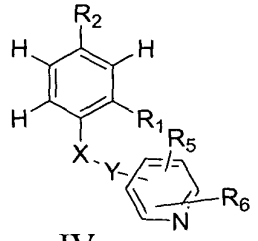
$Z_2$ is =O, =S , =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$ is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

4. The compound of claim 1 having the formula IV



IV

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

$R_1$ is $-HET^1$, $-CO-HET^1$, or $-NH-S(O)_2-Q^1$, the $HET^1$ being an optionally substituted $HET^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

$R_2$ is an electron withdrawing group;

$R_5$ is $-(CH_2)_k-S(O)_i-R_7$, $-NH-SO_2-R_7$, $-(CH_2)_k-W-R_8$, $-NH-(CZ_1)-R_8$, $-NH-(CZ_1)-NR_8$, substituted aryl, substituted $C_{1-4}$alkyl, or substituted $C_{1-4}$alkenyl;

$R_6$ is selected from H, halo, $HET^2$, -CN, $NH_2$, $NO_2$, alkyl, substituted alkyl, alkoxy, substituted alkoxy, $-NH-CO-HET^2$, and -NH-CO-aryl;

$R_7$ is selected from alkyl, substituted alkyl, aryl, substituted aryl, $-N(Q_{15})_2$, $HET^2$, and substituted $HET^2$;

$R_8$ is H, alkyl, substituted alkyl, aryl, substituted aryl, $HET^2$, substituted $HET^2$, cycloalkyl, substituted cycloalkyl;

Each $Q_{15}$ is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, $-OQ_{16}$, $-SQ_{16}$, $-S(O)_2Q_{16}$, $-S(O)Q_{16}$, $-OS(O)_2Q_{16}$, $-C(=NQ_{16})Q_{16}$, $-S(O)_2-N=S(O)(Q_{16})_2$, $-S(O)_2-N=S(Q_{16})_2$, $-SC(O)Q_{16}$, $-NQ_{16}Q_{16}$, $-C(O)Q_{16}$, $-C(S)Q_{16}$, $-C(O)OQ_{16}$, $-OC(O)Q_{16}$, $-C(O)NQ_{16}Q_{16}$, $-C(S)NQ_{16}Q_{16}$, $-C(O)C(Q_{16})_2OC(O)Q_{16}$, -CN, $-NQ_{16}C(O)Q_{16}$, $-NQ_{16}C(S)Q_{16}$, $-NQ_{16}C(O)NQ_{16}Q_{16}$, $-NQ_{16}C(S)NQ_{16}Q_{16}$, $-S(O)_2NQ_{16}Q_{16}$, $-NQ_{16}S(O)_2Q_{16}$, $-NQ_{16}S(O)Q_{16}$, $-NQ_{16}SQ_{16}$, $-NO_2$, and $-SNQ_{16}Q_{16}$. The alkyl, cycloalkyl, and cycloalkenyl being furher optionally substituted with =O or =S;

Each $Q_{16}$ is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, $-(CZ_2)-$, or $-(CHZ_3)-$;

$Z_1$ is O;

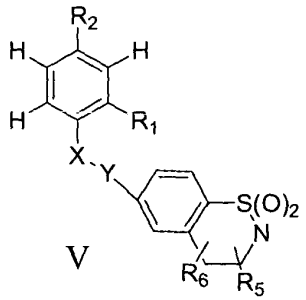
$Z_2$ is =O, =S , =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$ is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

5. The compound of claim 1 having the formula V




V

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

$R_1$ is $-HET^1$, $-CO-HET^1$, or $-NH-S(O)_2-Q^1$, the $HET^1$ being an optionally substituted $HET^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

$R_2$ is an electron withdrawing group;

$R_5$ is $-(CH_2)_k-S(O)_i-R_7$, $-NH-SO_2-R_7$, $-(CH_2)_k-W-R_8$, $-NH-(CZ_1)-R_8$, $-NH-(CZ_1)-NR_8$, substituted aryl, substituted $C_{1-4}$alkyl, or substituted $C_{1-4}$alkenyl;

$R_6$ is selected from H, halo, $HET^2$, -CN, $NH_2$, $NO_2$, alkyl, substituted alkyl, alkoxy, substituted alkoxy, $-NH-CO-HET^2$, and -NH-CO-aryl;

$R_7$ is selected from alkyl, substituted alkyl, aryl, substituted aryl, $-N(Q_{15})_2$, $HET^2$, and substituted $HET^2$;

$R_8$ is H, alkyl, substituted alkyl, aryl, substituted aryl, $HET^2$, substituted $HET^2$, cycloalkyl, substituted cycloalkyl;

Each $Q_{15}$ is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, $-OQ_{16}$, $-SQ_{16}$, $-S(O)_2Q_{16}$, $-S(O)Q_{16}$, $-OS(O)_2Q_{16}$, $-C(=NQ_{16})Q_{16}$, $-S(O)_2-N=S(O)(Q_{16})_2$, $-S(O)_2-N=S(Q_{16})_2$, $-SC(O)Q_{16}$, $-NQ_{16}Q_{16}$, $-C(O)Q_{16}$, $-C(S)Q_{16}$, $-C(O)OQ_{16}$, $-OC(O)Q_{16}$, $-C(O)NQ_{16}Q_{16}$, $-C(S)NQ_{16}Q_{16}$, $-C(O)C(Q_{16})_2OC(O)Q_{16}$, -CN, $-NQ_{16}C(O)Q_{16}$, $-NQ_{16}C(S)Q_{16}$, $-NQ_{16}C(O)NQ_{16}Q_{16}$, $-NQ_{16}C(S)NQ_{16}Q_{16}$, $-S(O)_2NQ_{16}Q_{16}$, $-NQ_{16}S(O)_2Q_{16}$, $-NQ_{16}S(O)Q_{16}$, $-NQ_{16}SQ_{16}$, $-NO_2$, and $-SNQ_{16}Q_{16}$. The alkyl, cycloalkyl, and cycloalkenyl being furher optionally substituted with =O or =S;

Each $Q_{16}$ is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, $-(CZ_2)-$, or $-(CHZ_3)-$;

$Z_1$ is O;

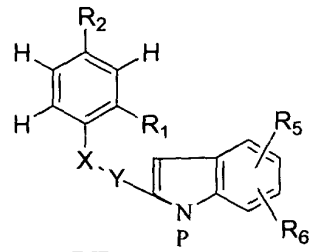
$Z_2$ is =O, =S , =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$ is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

6. The compound of claim 1 having the formula VI



VI

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

$R_1$ is –HET$^1$, –CO-HET$^1$, or –NH-S(O)$_2$-Q$^1$, the HET$^1$ being an optionally substituted HET$^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

P is $Q_{16}$;

$R_2$ is an electron withdrawing group;

$R_5$ is –$(CH_2)_k$-S(O)$_i$-$R_7$, -NH-$SO_2$-$R_7$, -$(CH_2)_k$-W-$R_8$, -NH-$(CZ_1)$-$R_8$, -NH-$(CZ_1)$-$NR_8$, substituted aryl, substituted $C_{1-4}$alkyl, or substituted $C_{1-4}$alkenyl;

$R_6$ is selected from H, halo, HET$^2$, -CN, $NH_2$, $NO_2$, alkyl, substituted alkyl, alkoxy, substituted alkoxy, -NH-CO-HET$^2$, and -NH-CO-aryl;

$R_7$ is selected from alkyl, substituted alkyl, aryl, substituted aryl, –N($Q_{15}$)$_2$, HET$^2$, and substituted HET$^2$;

$R_8$ is H, alkyl, substituted alkyl, aryl, substituted aryl, HET$^2$, substituted HET$^2$, cycloalkyl, substituted cycloalkyl;

Each $Q_{15}$ is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, -$OQ_{16}$, -$SQ_{16}$, -S(O)$_2$$Q_{16}$, -S(O)$Q_{16}$, -OS(O)$_2$$Q_{16}$, -C(=N$Q_{16}$)$Q_{16}$, -S(O)$_2$-N=S(O)($Q_{16}$)$_2$, -S(O)$_2$-N=S($Q_{16}$)$_2$, -SC(O)$Q_{16}$, -N$Q_{16}$$Q_{16}$, -C(O)$Q_{16}$, -C(S)$Q_{16}$, -C(O)O$Q_{16}$, -OC(O)$Q_{16}$, -C(O)N$Q_{16}$$Q_{16}$, -C(S)N$Q_{16}$$Q_{16}$, -C(O)C($Q_{16}$)$_2$OC(O)$Q_{16}$, -CN, -N$Q_{16}$C(O)$Q_{16}$, -N$Q_{16}$C(S)$Q_{16}$, -N$Q_{16}$C(O)N$Q_{16}$$Q_{16}$, -N$Q_{16}$C(S)N$Q_{16}$$Q_{16}$, -S(O)$_2$N$Q_{16}$$Q_{16}$, -N$Q_{16}$S(O)$_2$$Q_{16}$, -N$Q_{16}$S(O)$Q_{16}$, -N$Q_{16}$S$Q_{16}$, -

$NO_2$, and $-SNQ_{16}Q_{16}$. The alkyl, cycloalkyl, and cycloalkenyl being furher optionally substituted with =O or =S;

Each $Q_{16}$ is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, $-(CZ_2)-$, or $-(CHZ_3)-$;

$Z_1$ is O;

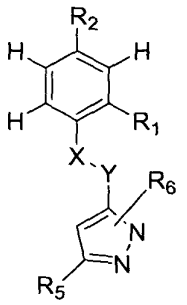
$Z_2$ is =O, =S , =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$ is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

7. The compound of claim 1 having the formula VII



VII

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

$R_1$ is $-HET^1$, $-CO-HET^1$, or $-NH-S(O)_2-Q^1$, the $HET^1$ being an optionally substituted $HET^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

$R_2$ is an electron withdrawing group;

$R_5$ is $-(CH_2)_k-S(O)_i-R_7$, $-NH-SO_2-R_7$, $-(CH_2)_k-W-R_8$, $-NH-(CZ_1)-R_8$, $-NH-(CZ_1)-NR_8$, substituted aryl, substituted $C_{1-4}$alkyl, or substituted $C_{1-4}$alkenyl;

$R_6$ is selected from H, halo, $HET^2$, -CN, $NH_2$, $NO_2$, alkyl, substituted alkyl, alkoxy, substituted alkoxy, -NH-CO-$HET^2$, and -NH-CO-aryl;

$R_7$ is selected from alkyl, substituted alkyl, aryl, substituted aryl, $-N(Q_{15})_2$, $HET^2$, and substituted $HET^2$;

$R_8$ is H, alkyl, substituted alkyl, aryl, substituted aryl, $HET^2$, substituted $HET^2$, cycloalkyl, substituted cycloalkyl;

Each $Q_{15}$ is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, $-OQ_{16}$, $-SQ_{16}$, $-S(O)_2Q_{16}$, $-S(O)Q_{16}$, $-OS(O)_2Q_{16}$, $-C(=NQ_{16})Q_{16}$, $-S(O)_2-N=S(O)(Q_{16})_2$, $-S(O)_2-N=S(Q_{16})_2$, $-SC(O)Q_{16}$, $-NQ_{16}Q_{16}$, $-C(O)Q_{16}$, $-C(S)Q_{16}$, $-C(O)OQ_{16}$, $-OC(O)Q_{16}$, $-C(O)NQ_{16}Q_{16}$, $-C(S)NQ_{16}Q_{16}$, $-C(O)C(Q_{16})_2OC(O)Q_{16}$, -CN, $-NQ_{16}C(O)Q_{16}$, $-NQ_{16}C(S)Q_{16}$, $-NQ_{16}C(O)NQ_{16}Q_{16}$, $-NQ_{16}C(S)NQ_{16}Q_{16}$, $-S(O)_2NQ_{16}Q_{16}$, $-NQ_{16}S(O)_2Q_{16}$, $-NQ_{16}S(O)Q_{16}$, $-NQ_{16}SQ_{16}$, $-NO_2$, and $-SNQ_{16}Q_{16}$. The alkyl, cycloalkyl, and cycloalkenyl being furher optionally substituted with =O or =S;

Each $Q_{16}$ is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, $-(CZ_2)-$, or $-(CHZ_3)-$;

$Z_1$ is O;

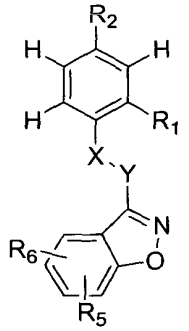
$Z_2$ is =O, =S , =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$ is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

8. The compound of claim 1 having the formula VIII




VIII

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

$R_1$ is $-HET^1$, $-CO-HET^1$, or $-NH-S(O)_2-Q^1$, the $HET^1$ being an optionally substituted $HET^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

$R_2$ is an electron withdrawing group;

$R_5$ is H, halo, $NO_2$, CN, $-(CH_2)_k-S(O)_i-R_7$, $-NH-SO_2-R_7$, $-(CH_2)_k-W-R_8$ $-NH-(CZ_1)-R_8$, $-(CZ_1)-NH-R_8$, $-NH-(CZ_1)-NR_8R_8$, $-(CH_2)_k-NR_8R_8$, substituted aryl, substituted HET, substituted $C_{1-4}$alkyl, or substituted $C_{1-4}$alkenyl;

$R_6$ is selected from H, halo, aryl, substituted aryl, HET, substituted HET, -CN, $NH_2$, $NO_2$, alkyl, substituted alkyl, alkoxy, substituted alkoxy, $-(CH_2)_k-S(O)_i-R_7$, $-NH-SO_2-R_7$, $-(CH_2)_k-W-R_8$, $-NH-(CZ_1)-R_8$, $-(CZ_1)-NH-R_8$, $-NH-(CZ_1)-NR_8R_8$, or substituted $C_{1-4}$alkenyl;

$R_7$ is selected from alkyl, substituted alkyl, aryl, substituted aryl, $-N(Q_{15})_2$, HET, and substituted HET;

Each $R_8$ is independently H, alkyl, substituted alkyl, $-OQ_{16}$, aryl, substituted aryl, HET, substituted HET, cycloalkyl, and substituted cycloalkyl, or two $R_8$ substituents when attached to the same atom may be taken together to form a 5-8 membered ring, wherein the ring includes the atom to which the two $R_8$ substituents attach;

Each $Q_{15}$ is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, $-OQ_{16}$, $-SQ_{16}$, $-S(O)_2Q_{16}$, $-S(O)Q_{16}$, $-OS(O)_2Q_{16}$, $-C(=NQ_{16})Q_{16}$, $-S(O)_2-N=S(O)(Q_{16})_2$, $-S(O)_2-N=S(Q_{16})_2$, $-SC(O)Q_{16}$, $-NQ_{16}Q_{16}$, $-C(O)Q_{16}$, $-C(S)Q_{16}$, $-C(O)OQ_{16}$, $-OC(O)Q_{16}$, $-C(O)NQ_{16}Q_{16}$, $-C(S)NQ_{16}Q_{16}$, $-(O)C(Q_{16})_2OC(O)Q_{16}$, -CN, $-NQ_{16}C(O)Q_{16}$, $-NQ_{16}C(S)Q_{16}$, $-NQ_{16}C(O)NQ_{16}Q_{16}$, $-NQ_{16}C(S)NQ_{16}Q_{16}$, $-S(O)_2NQ_{16}Q_{16}$, $-NQ_{16}S(O)_2Q_{16}$, $-NQ_{16}S(O)Q_{16}$, $-NQ_{16}SQ_{16}$, $-NO_2$, and $-SNQ_{16}Q_{16}$. The alkyl, cycloalkyl, and cycloalkenyl being further optionally substituted with =O or =S;

Each $Q_{16}$ is independently selected from -H, alkyl, cycloalkyl, phenyl, benzyl, $-CH_2$-substituted phenyl, and Het in which each of alkyl, cycloalkyl, phenyl, and Het optionally include 1-3 halos;

W is O, S, $-(CZ_2)-$, or $-(CHZ_3)-$, provided that W is not S or O when $R_5$ or $R_6$ are $-(CH_2)_k-W-OR_{16}$;

$Z_1$ is =O;

$Z_2$ is =O, =S , =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$ is -OH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

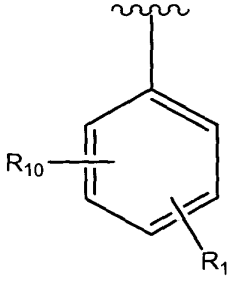
i is 0, 1, or 2; and

k is 0, 1, or 2.

9. The compound of claim 8, wherein at least one of $R_5$ and $R_6$ is a substituted phenyl or substituted HET.

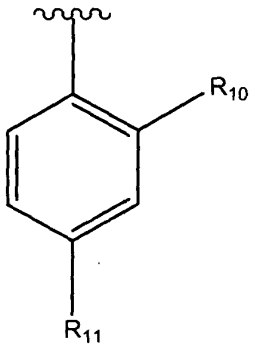
10. The compound of claim 9, wherein at least one of $R_5$ and $R_6$ is pyridine, pyrimidine, pyridazine, or pyrazine, each of which is optionally substituted with the substituents described for substituted HET.

11. The compound of claim 9, wherein the substituted phenyl has the formula




, wherein each $R_{10}$ and $R_{11}$ is selected from -F, -Cl, -Br, -I, $-OQ_{16}$, $-Q_{16}$, $-SQ_{16}$, $-S(O)_2Q_{16}$, $-S(O)Q_{16}$, $-OS(O)_2Q_{16}$, $-SC(O)Q_{16}$, $-NQ_{16}Q_{16}$, $-C(O)Q_{16}$, $-C(S)Q_{16}$, $-C(O)OQ_{16}$, $-OC(O)Q_{16}$, $-C(O)NQ_{16}Q_{16}$, $-C(S)NQ_{16}Q_{16}$, $-(O)C(Q_{16})_2OC(O)Q_{16}$, -CN, $-NQ_{16}C(O)Q_{16}$, $-NQ_{16}C(S)Q_{16}$, $-NQ_{16}C(O)NQ_{16}Q_{16}$, $-NQ_{16}C(S)NQ_{16}Q_{16}$, $-S(O)_2NQ_{16}Q_{16}$, $-NQ_{16}S(O)_2Q_{16}$, $-NQ_{16}S(O)Q_{16}$, $-NQ_{16}SQ_{16}$, $-NO_2$, and $-SNQ_{16}Q_{16}$.

12. The compound of claim 8, wherein the substituted phenyl has the formula




13. The compound of claim 8, wherein one of $R_5$ or $R_6$ is -NH-($CZ_1$)-$NR_8R_8$.

14. The compound of claim 13, wherein –$NR_8R_8$ forms a 5-8 membered ring.

15. The compound of claim 14, wherein the ring is morpholino, pyrrolidinyl, or piperdinyl.

16. The compound of 13, wherein at least one of the $R_8$ substituents is benzyl or –$CH_2$-substituted phenyl.

17. The compound of claim 8, wherein one of $R_5$ or $R_6$ is –$(CH_2)_k$-$S(O)_i$-$R_7$ or -NH-$SO_2$-$R_7$.

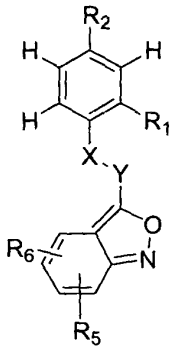
18. The compound of claim 17, wherein $R_7$ is het, substituted het, alkyl, or substituted alkyl.

19. The compound of claim 18, wherein het is indolinyl, pyrrolindinyl, or indolyl, pyrrolyl.

20. The compound of claim 18, wherein sustituted het includes a het substituent substituted with 1-3 of halo or CN.

21. The compound of claim 18, wherein substituted alkyl is an alkyl substituted with 1-3 of OH, $NH_2$, $NHQ_{16}$, -$NR_8R_8$.

22. The compound of claim 1 having the formula XXX



XXX

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

$R_1$ is $-HET^1$, $-CO-HET^1$, or $-NH-S(O)_2-Q^1$, the $HET^1$ being an optionally substituted $HET^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

$R_2$ is an electron withdrawing group;

$R_5$ is H, halo, $NO_2$, CN, $-(CH_2)_k-S(O)_i-R_7$, $-NH-SO_2-R_7$, $-(CH_2)_k-W-R_8$ $-NH-(CZ_1)-R_8$, $-(CZ_1)-NH-R_8$, $-NH-(CZ_1)-NR_8R_8$, $-(CH_2)_k-NR_8R_8$, substituted aryl, substituted HET, substituted $C_{1-4}$alkyl, or substituted $C_{1-4}$alkenyl;

$R_6$ is selected from H, halo, aryl, substituted aryl, HET, substituted HET, -CN, $NH_2$, $NO_2$, alkyl, substituted alkyl, alkoxy, substituted alkoxy, $-(CH_2)_k-S(O)_i-R_7$, $-NH-SO_2-R_7$, $-(CH_2)_k-W-R_8$, $-NH-(CZ_1)-R_8$, $-(CZ_1)-NH-R_8$, $-NH-(CZ_1)-NR_8R_8$, or substituted $C_{1-4}$alkenyl;

$R_7$ is selected from alkyl, substituted alkyl, aryl, substituted aryl, $-N(Q_{15})_2$, HET, and substituted HET;

Each $R_8$ is independently H, alkyl, substituted alkyl, $-OQ_{16}$, aryl, substituted aryl, HET, substituted HET, cycloalkyl, and substituted cycloalkyl, or two $R_8$ substituents when attached to the same atom may be taken together to form a 5-8

membered ring, wherein the ring includes the atom to which the two $R_8$ substituents attach;

Each $Q_{15}$ is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, $-OQ_{16}$, $-SQ_{16}$, $-S(O)_2Q_{16}$, $-S(O)Q_{16}$, $-OS(O)_2Q_{16}$, $-C(=NQ_{16})Q_{16}$, $-S(O)_2-N=S(O)(Q_{16})_2$, $-S(O)_2-N=S(Q_{16})_2$, $-SC(O)Q_{16}$, $-NQ_{16}Q_{16}$, $-C(O)Q_{16}$, $-C(S)Q_{16}$, $-C(O)OQ_{16}$, $-OC(O)Q_{16}$, $-C(O)NQ_{16}Q_{16}$, $-C(S)NQ_{16}Q_{16}$, $-(O)C(Q_{16})_2OC(O)Q_{16}$, -CN, $-NQ_{16}C(O)Q_{16}$, $-NQ_{16}C(S)Q_{16}$, $-NQ_{16}C(O)NQ_{16}Q_{16}$, $-NQ_{16}C(S)NQ_{16}Q_{16}$, $-S(O)_2NQ_{16}Q_{16}$, $-NQ_{16}S(O)_2Q_{16}$, $-NQ_{16}S(O)Q_{16}$, $-NQ_{16}SQ_{16}$, $-NO_2$, and $-SNQ_{16}Q_{16}$. The alkyl, cycloalkyl, and cycloalkenyl being further optionally substituted with =O or =S;

Each $Q_{16}$ is independently selected from -H, alkyl, cycloalkyl, phenyl, benzyl, $-CH_2$-substituted phenyl, and Het in which each of alkyl, cycloalkyl, phenyl, and Het optionally include 1-3 halos;

W is O, S, $-(CZ_2)-$, or $-(CHZ_3)-$, provided that W is not S or O when $R_5$ or $R_6$ are $-(CH_2)_k-W-OR_{16}$;

$Z_1$ is =O;

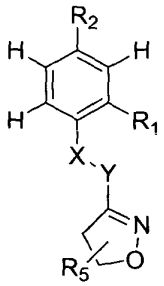
$Z_2$ is =O, =S , =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$ is -OH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

23. The compound of claim 1 having the formula IX




IX

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

$R_1$ is $-HET^1$, $-CO-HET^1$, or $-NH-S(O)_2-Q^1$, the $HET^1$ being an optionally substituted $HET^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

$R_2$ is an electron withdrawing group;

$R_5$ is $-(CH_2)_k-S(O)_i-R_7$, $-NH-SO_2-R_7$, $-(CH_2)_k-W-R_8$, $-NH-(CZ_1)-R_8$, $-NH-(CZ_1)-NR_8$, substituted aryl, substituted $C_{1-4}$alkyl, or substituted $C_{1-4}$alkenyl;

$R_6$ is selected from H, halo, $HET^2$, -CN, $NH_2$, $NO_2$, alkyl, substituted alkyl, alkoxy, substituted alkoxy, $-NH-CO-HET^2$, and -NH-CO-aryl;

$R_7$ is selected from alkyl, substituted alkyl, aryl, substituted aryl, $-N(Q_{15})_2$, $HET^2$, and substituted $HET^2$;

$R_8$ is H, alkyl, substituted alkyl, aryl, substituted aryl, $HET^2$, substituted $HET^2$, cycloalkyl, substituted cycloalkyl;

Each $Q_{15}$ is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, $-OQ_{16}$, $-SQ_{16}$, $-S(O)_2Q_{16}$, $-S(O)Q_{16}$, $-OS(O)_2Q_{16}$, $-C(=NQ_{16})Q_{16}$, $-S(O)_2-N=S(O)(Q_{16})_2$, $-S(O)_2-N=S(Q_{16})_2$, $-SC(O)Q_{16}$, $-NQ_{16}Q_{16}$, $-C(O)Q_{16}$, $-C(S)Q_{16}$, $-C(O)OQ_{16}$, $-OC(O)Q_{16}$, $-C(O)NQ_{16}Q_{16}$, $-C(S)NQ_{16}Q_{16}$, $-C(O)C(Q_{16})_2OC(O)Q_{16}$, -CN, $-NQ_{16}C(O)Q_{16}$, $-NQ_{16}C(S)Q_{16}$, $-NQ_{16}C(O)NQ_{16}Q_{16}$, $-NQ_{16}C(S)NQ_{16}Q_{16}$, $-S(O)_2NQ_{16}Q_{16}$, $-NQ_{16}S(O)_2Q_{16}$, $-NQ_{16}S(O)Q_{16}$, $-NQ_{16}SQ_{16}$, $-NO_2$, and $-SNQ_{16}Q_{16}$. The alkyl, cycloalkyl, and cycloalkenyl being furher optionally substituted with =O or =S;

Each $Q_{16}$ is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, $-(CZ_2)-$, or $-(CHZ_3)-$;

$Z_1$ is O;

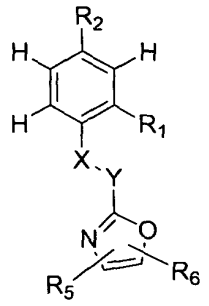
$Z_2$ is =O, =S , =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$ is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

24. The compound of claim 1 having the formula X



X

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

$R_1$ is $-HET^1$, $-CO-HET^1$, or $-NH-S(O)_2-Q^1$, the $HET^1$ being an optionally substituted $HET^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

$R_2$ is an electron withdrawing group;

$R_5$ is $-(CH_2)_k-S(O)_i-R_7$, $-NH-SO_2-R_7$, $-(CH_2)_k-W-R_8$, $-NH-(CZ_1)-R_8$, $-NH-(CZ_1)-NR_8$, substituted aryl, substituted $C_{1-4}$alkyl, or substituted $C_{1-4}$alkenyl;

$R_6$ is selected from H, halo, -CN, $NH_2$, $NO_2$, alkyl;

$R_7$ is selected from alkyl, substituted alkyl, aryl, substituted aryl, $-N(Q_{15})_2$, $HET^2$, and substituted $HET^2$;

$R_8$ is H, alkyl, substituted alkyl, aryl, substituted aryl, $HET^2$, substituted $HET^2$, cycloalkyl, substituted cycloalkyl;

Each $Q_{15}$ is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, $-OQ_{16}$, $-SQ_{16}$, $-S(O)_2Q_{16}$, $-S(O)Q_{16}$, $-OS(O)_2Q_{16}$, $-C(=NQ_{16})Q_{16}$, $-S(O)_2-N=S(O)(Q_{16})_2$, $-S(O)_2-N=S(Q_{16})_2$, $-SC(O)Q_{16}$, $-NQ_{16}Q_{16}$, $-C(O)Q_{16}$, $-C(S)Q_{16}$, $-C(O)OQ_{16}$, $-OC(O)Q_{16}$, $-C(O)NQ_{16}Q_{16}$, $-C(S)NQ_{16}Q_{16}$, $-C(O)C(Q_{16})_2OC(O)Q_{16}$, -CN, $-NQ_{16}C(O)Q_{16}$, $-NQ_{16}C(S)Q_{16}$, $-NQ_{16}C(O)NQ_{16}Q_{16}$, $-NQ_{16}C(S)NQ_{16}Q_{16}$, $-S(O)_2NQ_{16}Q_{16}$, $-NQ_{16}S(O)_2Q_{16}$, $-NQ_{16}S(O)Q_{16}$, $-NQ_{16}SQ_{16}$, -

$NO_2$, and -$SNQ_{16}Q_{16}$. The alkyl, cycloalkyl, and cycloalkenyl being furher optionally substituted with =O or =S;

Each $Q_{16}$ is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, -($CZ_2$)-, or -($CHZ_3$)-;

$Z_1$ is O;

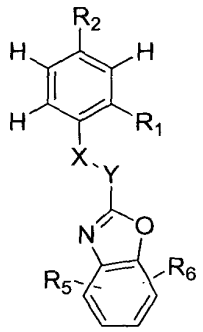
$Z_2$ is =O, =S , =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$ is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

25. The compound of claim 1 having the formula XI




XI

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

$R_1$ is –$HET^1$, –CO-$HET^1$, or –NH-$S(O)_2$-$Q^1$, the $HET^1$ being an optionally substituted $HET^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

$R_2$ is an electron withdrawing group;

$R_5$ is –$(CH_2)_k$-$S(O)_i$-$R_7$, -NH-$SO_2$-$R_7$, -$(CH_2)_k$-W-$R_8$, -NH-$(CZ_1)$-$R_8$, -NH-$(CZ_1)$-$NR_8$, substituted aryl, substituted $C_{1-4}$alkyl, or substituted $C_{1-4}$alkenyl;

$R_6$ is selected from H, halo, $HET^2$, -CN, $NH_2$, $NO_2$, alkyl, substituted alkyl, alkoxy, substituted alkoxy, -NH-CO-$HET^2$, and -NH-CO-aryl;

$R_7$ is selected from alkyl, substituted alkyl, aryl, substituted aryl, $-N(Q_{15})_2$, $HET^2$, and substituted $HET^2$;

$R_8$ is H, alkyl, substituted alkyl, aryl, substituted aryl, $HET^2$, substituted $HET^2$, cycloalkyl, substituted cycloalkyl;

Each $Q_{15}$ is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, $-OQ_{16}$, $-SQ_{16}$, $-S(O)_2Q_{16}$, $-S(O)Q_{16}$, $-OS(O)_2Q_{16}$, $-C(=NQ_{16})Q_{16}$, $-S(O)_2-N=S(O)(Q_{16})_2$, $-S(O)_2-N=S(Q_{16})_2$, $-SC(O)Q_{16}$, $-NQ_{16}Q_{16}$, $-C(O)Q_{16}$, $-C(S)Q_{16}$, $-C(O)OQ_{16}$, $-OC(O)Q_{16}$, $-C(O)NQ_{16}Q_{16}$, $-C(S)NQ_{16}Q_{16}$, $-C(O)C(Q_{16})_2OC(O)Q_{16}$, -CN, $-NQ_{16}C(O)Q_{16}$, $-NQ_{16}C(S)Q_{16}$, $-NQ_{16}C(O)NQ_{16}Q_{16}$, $-NQ_{16}C(S)NQ_{16}Q_{16}$, $-S(O)_2NQ_{16}Q_{16}$, $-NQ_{16}S(O)_2Q_{16}$, $-NQ_{16}S(O)Q_{16}$, $-NQ_{16}SQ_{16}$, $-NO_2$, and $-SNQ_{16}Q_{16}$. The alkyl, cycloalkyl, and cycloalkenyl being furher optionally substituted with =O or =S;

Each $Q_{16}$ is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, $-(CZ_2)-$, or $-(CHZ_3)-$;

$Z_1$ is O;

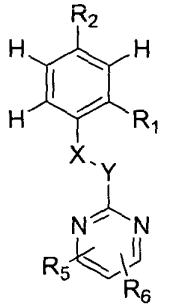
$Z_2$ is =O, =S , =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$ is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

26. The compound of claim 1 having the formula XII




XII

or a pharmaceutically acceptable salt thereof,

wherein

X = NH

Y = CO, CS, -C(=N-CN) or

X and Y together form an alkene, or $C_3$-$C_5$ cycloalkyl;

$R_1$ is $-HET^1$, $-CO-HET^1$, or $-NH-S(O)_2-Q^1$, the $HET^1$ being an optionally substituted $HET^1$;

$Q_1$ is selected from the group consisting of H, optionally substituted alkyl, or optionally substituted aryl;

$R_2$ is an electron withdrawing group;

$R_5$ is $-(CH_2)_k-S(O)_i-R_7$, $-NH-SO_2-R_7$, $-(CH_2)_k-W-R_8$, $-NH-(CZ_1)-R_8$, $-NH-(CZ_1)-NR_8$, substituted aryl, substituted $C_{1-4}$alkyl, or substituted $C_{1-4}$alkenyl;

$R_6$ is selected from H, halo, $HET^2$, -CN, $NH_2$, $NO_2$, alkyl, substituted alkyl, alkoxy, substituted alkoxy, $-NH-CO-HET^2$, and -NH-CO-aryl;

$R_7$ is selected from alkyl, substituted alkyl, aryl, substituted aryl, $-N(Q_{15})_2$, $HET^2$, and substituted $HET^2$;

$R_8$ is H, alkyl, substituted alkyl, aryl, substituted aryl, $HET^2$, substituted $HET^2$, cycloalkyl, substituted cycloalkyl;

Each $Q_{15}$ is independently H, alkyl, cycloalkyl, heterocycloalkyl, heteroaryl, phenyl, or naphthyl, each optionally substituted with 1-4 substituents independently selected from -F, -Cl, -Br, -I, $-OQ_{16}$, $-SQ_{16}$, $-S(O)_2Q_{16}$, $-S(O)Q_{16}$, $-OS(O)_2Q_{16}$, $-C(=NQ_{16})Q_{16}$, $-S(O)_2-N=S(O)(Q_{16})_2$, $-S(O)_2-N=S(Q_{16})_2$, $-SC(O)Q_{16}$, $-NQ_{16}Q_{16}$, $-C(O)Q_{16}$, $-C(S)Q_{16}$, $-C(O)OQ_{16}$, $-OC(O)Q_{16}$, $-C(O)NQ_{16}Q_{16}$, $-C(S)NQ_{16}Q_{16}$, $-C(O)C(Q_{16})_2OC(O)Q_{16}$, -CN, $-NQ_{16}C(O)Q_{16}$, $-NQ_{16}C(S)Q_{16}$, $-NQ_{16}C(O)NQ_{16}Q_{16}$, $-NQ_{16}C(S)NQ_{16}Q_{16}$, $-S(O)_2NQ_{16}Q_{16}$, $-NQ_{16}S(O)_2Q_{16}$, $-NQ_{16}S(O)Q_{16}$, $-NQ_{16}SQ_{16}$, $-NO_2$, and $-SNQ_{16}Q_{16}$. The alkyl, cycloalkyl, and cycloalkenyl being furher optionally substituted with =O or =S;

Each $Q_{16}$ is independently selected from -H, alkyl, and cycloalkyl. The alkyl and cycloalkyl optionally including 1-3 halos;

W is O, S, $-(CZ_2)-$, or $-(CHZ_3)-$;

$Z_1$ is O;

$Z_2$ is =O, =S , =N-OH, =N-O-alkyl, or =N-O-substituted alkyl;

$Z_3$ is -OH, -N=NH, -N=N-alkyl, -NH-alkyl, or -NH-substituted alkyl;

i is 0, 1, or 2; and

k is 0, 1, or 2.

27. The compound of claim 1, wherein Y is –CO–.

28. The compound of claim 1, wherein Y is –CS–.

29. The compound of claim 1, wherein X-Y is –C=C–.

30. The compound of claim 1, wherein is cyclopropyl.

31. The compound of claim 1, wherein $R_2$ is halo, -CN, -$NO_2$, $HET^2$, substituted $HET^2$, aryl, substituted aryl, -(CO)-alkyl, -(CO)-substituted alkyl, -(CO)-aryl, -(CO)-substituted aryl, -(CO)-O-alkyl, -(CO)-O-substituted alkyl, -(CO)-O-aryl, -(CO)-O-substituted aryl, -$OC(Z_n)_3$, -$C(Z_n)_3$, -$C(Z_n)_2$-O-$C(Z_m)_3$, -$SO_2$-$C(Z_n)_3$, -$SO_2$-aryl, -$CN(Q_{17})_2$, -$C(NQ_{17})Q_{17}$. –$CH=C(Q_{17})_2$, or -$C\equiv C$-$Q_{17}$, in which each Zn and Zm is independently H, halo, -CN, -$NO_2$ -OH, or $C_{1-4}$alkyl optionally substituted with 1-3 halo, -OH, $NO_2$, provided that at least one of Zn is halo, -CN, or $NO_2$.

32. The compound of claim 31, wherein $R_2$ is Br, Cl, F, I, -CN, formyl, acetyl, methoxyimino, hydroxyimino, -$CH_2$-halo, $CH_2$-CN, phenyl, thienyl, pyrazinyl, 1-methyl-1H-pyrrol-2-yl, pyridin-2-yl, chlorophenyl, nitrophenyl, cyanophenyl, chlorothienyl, methylthienyl, fluorophenyl, (trifluoromethy)phenyl, di (trifluoromethy)phenyl, difluorophenyl, dimethylisoxazolyl, dimethoxypyrimidinyl.

33. The compound of claim 1, wherein $R_5$ is -$NH_2$, -$SO_2$-NH-alkyl, -$SO_2$-NH-substituted alkyl, -$SO_2$-NH-aryl, -NH-$SO_2$-aryl, -$SO_2$-NH-substituted aryl, -NH-$SO_2$-substituted aryl, -$SO_2$-NH-$HET^2$, -$SO_2$-NH-substituted $HET^2$, -$SO_2$-N(alkyl)(substituted alkyl), -$SO_2$-N(alkyl)(aryl), -$SO_2$-N(alkyl)(substituted aryl), -$SO_2$-N(alkyl)($HET^2$), -$SO_2$-N(alkyl)(substituted $HET^2$), -S-alkyl, -S-substituted alkyl, -O-alkyl, -O-aryl, -S-substituted alkyl, -$CH_2$-S-alkyl, -$CH_2$-S-substituted alkyl, -$(CH_2)_2$-S-alkyl, -$(CH_2)_2$-S-substituted alkyl, -C(O)-aryl, -C(O)H, -C(OH)-aryl, -C(N-$OCH_3$)-aryl, -C(N-OH)-aryl, -C(O)-$C_{1-6}$cycloalkyl, -NH-C(O)-O-C1-4alkyl, -NH-C(O)-aryl, -

NH-C(O)-substituted aryl, -NH-C(O)-HET$^2$, -NH-C(O)-substituted HET$^2$, -NHC(O)NH-aryl, -NHC(O)NH-substituted aryl, -NHC(O)NH-HET$^2$, -NHC(O)NH-substituted HET$^2$.

34. The compound of claim 33, wherein $R_5$ is (diethylamino)sulfonyl, (1H-indol-5-yl)aminosulfonyl, (furylmethylamino)sulfonyl, (ethoxycarbonyl)-1-piperazinylsulfonyl, pyridinylethylaminosulfonyl, (benzylamino)sulfonyl, (2-hydroxy-1-methylethyl)aminosulfonyl, (4-carboxyanilino)sulfonyl, (3,4-dihydro-1(2H)-quinolinyl)sulfonyl, [2-(3,5-dimethoxyphenyl)ethyl]aminosulfonyl, [(3S)-3-hydroxypyrrolidinyl]sulfonyl, (ethylanilino)sulfonyl, (3,5-dimethoxyanilino)sulfonyl, (2-hydroxy-2-phenylethyl)(methyl)amino]sulfonyl, (2,3-dihydro-1H-indol-1-yl)sulfonyl, (5-methoxy-2,3-dihydro-1H-indol-1-yl)sulfonyl, (5-fluoro-2,3-dihydro-1H-indol-1-yl)sulfonyl, (1H-benzimidazol-1-yl)sulfonyl, (5-fluoro-1H-indol-1-yl)sulfonyl, (1H-indol-1-yl)sulfonyl, (6-fluoro-1H-indol-1-yl)sulfonyl, (5-chloro-1H-indol-1-yl)sulfonyl, (6-chloro-1H-indol-1-yl)sulfonyl, (6-chloro-5-fluoro-1H-indol-1-yl)sulfonyl, (1H-pyrrol-1-yl)sulfonyl, (5-methoxy-1H-indol-1-yl)sulfonyl, (1H-pyrrolo[2,3-b]pyridin-1-yl)sulfonyl, (5-bromo-2,3-dihydro-1H-indol-1-yl)sulfonyl, (3,3-dimethyl-2,3-dihydro-1H-indol-1-yl)sulfonyl, (4-chlorophenyl)(methyl)amino]sulfonyl, benzylthio, methyl(pyridin-2-yl)amino]sulfonyl, (1H-indol-1-yl)sulfonyl, (pyrrolidin-1-yl)sulfonyl, (2-methylpyrrolidin-1-yl)sulfonyl, (morpholin-4-yl)sulfonyl, (piperidin-1-yl)sulfonyl, (methoxy-1H-indol-1-yl)sulfonyl, {methyl[(1R)-1-phenylethyl]amino}sulfonyl, {methyl[(1S)-1-phenylethyl]amino}sulfonyl, [(2-aminophenyl)(methyl)amino]sulfonyl, (dipropylamino)sulfonyl, benzylsulfanyl, (dipropylamino)sulfanyl, (dipropylamino)sulfinyl, [4-chloro(methyl)anilino]sulfonyl, (phenylthio)methyl, benzyloxy, 3-(ethylthio), (pyridin-4-ylmethyl)thio, phenoxy, phenylthio, (pyridin-4-ylmethyl)thio, benzylthio, (1-phenylethyl)thio, cyclopentylthio, cyclopentylsulfinyl, benzoyl, hydroxy(phenyl)methyl, (methoxyimino)(phenyl)methyl, (hydroxyimino)(phenyl)methyl, cyclopentylcarbonyl, benzoylamino, furoylamino, (thien-2-ylacetyl)amino, (mesitylcarbonyl)amino, (1,3-benzodioxol-5-ylcarbonyl)amino, 3-(2,4-dimethoxybenzoyl)amino, (phenylthio)acetylamino, (anilinocarbonyl)amino, (2,4-difluorophenyl)amino carbonylamino, (3-cyanophenyl)aminocarbonylamino, (3-acetylphenyl)aminocarbonylamino, -

(trifluoromethoxy)phenylsulfonylamino, (thien-2-ylacetyl)amino, (5-nitro-2-furoyl)amino, (5-chloro-2-methoxyphenyl)aminocarbonylamino, (4-phenoxyphenyl)aminocarbonylamino, (4-acetylphenyl)aminocarbonylamino, phenylethynyl, 2-phenylethyl, 4-Chlorophenyl, benzyloxy, phenoxy, alkylthio, phenyl, dihalophenyl, amino, acetylamino, benzoylamino, phenylacetylamino, methylsulfonylamino, phenylsulfonylamino, benzylsulfonylamino, benzyloxy, hydroxy, 3-phenoxypropoxy, (2,3-dihydro-1,4-benzodioxin-2-yl)methoxy, cyclobutylmethoxy, (2,2-dimethyl-1,3-dioxolan-4-yl)methoxy, 2,3-dihydroxypropoxy, cyclobutyloxy, 2-methoxy-1-methylethoxy, isopropoxy, cyclopropylmethoxy, cyclohexylmethoxy, 2-methoxyethoxy, tetrahydro-2H-pyran-2-yl-methoxy, (oxiran-2-yl)methoxy, 2-hydroxy-3-isopropoxypropoxy, furylmethoxy, pentyloxy, phenylacetylamino, Benzoylamino, Acetyloxyacetylamino, cyclopentylcarbonylamino, 6-Chloropyridin-3-ylcarbonylamino, isoxazol-5-ylcarbonylamino, 2,4-difluorobenzoylamino, fluoroacetylamino, Acetylamino, 4-Chlorophenylacetylamino, 4-methoxyphenylacetylamino, cyclopentylacetylamino, 3-fluorobenzoylamino, 3-cyanophenylacetylamino, cyclohexylcarbonylamino, propionylamino, 5-methoxy-5-oxopentanoylamino, Butyrylamino, 4-Bromobenzoylamino, 3-phenylpropanoylamino, phenoxyacetylamino, 3-cyclopentylpropanoylamino, 3-methoxy-3-oxopropanoylamino, 2-ethylhexanoylamino, 3,4-dimethoxyphenylacetylamino, 3,5,5-trimethylhexanoylamino, cyclopropylcarbonylamino, methoxyacetylamino, 3-methylbutanoylamino, pentanoylamino, 4,7,7-trimethyl-3-oxo-2-oxabicyclo[2.2.1]hept-1-ylcarbonylamino, Chloro(phenyl)acetylamino, Benzyloxyacetylamino, 3-ethoxy-3-oxopropanoylamino, 1-Adamantylcarbonylamino, hexanoylamino, 2-phenylcyclopranolyamino, 2-phenylbutanoylamino, heptanoylamino, Acetyloxyphenylacetylamino, thien-2-ylcarbonylamino, 2-methylbutanoylamino, 8-methoxy-8-oxooctanoylamino, 2-ethylbutanoylamino, octanoylamino, cyclobutylcarbonylamino, 1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl, Benzylthio, morpholin-4-ylsulfonylbenzoylamino, 1H-indol-2-ylcarbonylamino, 1-methyl-1H-indol-2-ylcarbonylamino, 5-phenylisoxazol-3-ylcarbonylamino, 5-phenylpentanoylamino, 4-phenylbutanoylamino, 4-(4-methoxyphenyl)butanoylamino, 2-Chlorophenylacetylamino, 2,4-dichlorophenylacetylamino, 3,4-dichlorophenylacetylamino, 3-Chlorophenylacetylamino, 3-(trifluoromethyl)phenylacetylamino, 3-methylphenylacetylamino, 4-tert-

Butylphenylacetylamino, 3-methoxyphenylacetylamino, 2-methoxyphenylacetylamino, 2-methylphenylacetylamino, 4-(trifluoromethyl)phenylacetylamino, 4-isopropylphenylacetylamino, 4-methylphenylacetylamino, 4-fluorophenylacetylamino, 2-(trifluoromethyl)phenylacetylamino, 3-fluorophenylacetylamino, phenylthioacetylamino, naphthylacetylamino, naphthyloxyacetylamino, 2-propoxybenzoylamino, tetrahydrofuran-3-ylcarbonylamino, 1-methylcyclopropylcarbonylamino, 4-ethoxyphenylacetylamino, 1-Benzothien-3-ylacetylamino, 1,1'-Biphenyl-4-ylcarbonylamino, 4-Butoxybenzoylamino, 2-(2-phenylethyl)benzoylamino, 1,1'-Biphenyl-2-ylcarbonylamino, 4-(ethylthio)benzoylamino, 2-(methylsulfonyl)benzoylamino, 2,6-dichlorophenylacetylamino, 1,1'-Biphenyl-4-ylacetylamino, 1,3-Benzodioxol-5-ylacetylamino, 3,3-dimethylbutanoylamino, thien-2-ylacetylamino, 3-methyl-5-phenylisoxazol-4-ylcarbonylamino, [2-(2-methoxyethoxy)ethoxy]acetylamino, (2-hydroxybenzoyl)amino, prolylamino, (3-methylisoxazol-5-yl)acetylamino, 4-Azido-3-iodobenzoylamino, (diethylamino)sulfonyl, (1H-indol-5-yl)aminosulfonyl, (furylmethylamino)sulfonyl, (ethoxycarbonyl)-1-piperazinylsulfonyl, pyridinylethylaminosulfonyl, (benzylamino)sulfonyl, (2-hydroxy-1-methylethyl)aminosulfonyl, (4-carboxyanilino)sulfonyl, (3,4-dihydro-1(2H)-quinolinyl)sulfonyl, [2-(3,5-dimethoxyphenyl)ethyl]aminosulfonyl, [(3S)-3-hydroxypyrrolidinyl]sulfonyl, (ethylanilino)sulfonyl, (3,5-dimethoxyanilino)sulfonyl, (2-hydroxy-2-phenylethyl)(methyl)amino]sulfonyl, (2,3-dihydro-1H-indol-1-yl)sulfonyl, (5-methoxy-2,3-dihydro-1H-indol-1-yl)sulfonyl, (5-fluoro-2,3-dihydro-1H-indol-1-yl)sulfonyl, (1H-benzimidazol-1-yl)sulfonyl, (5-fluoro-1H-indol-1-yl)sulfonyl, (1H-indol-1-yl)sulfonyl, (6-fluoro-1H-indol-1-yl)sulfonyl, (5-chloro-1H-indol-1-yl)sulfonyl, (6-chloro-1H-indol-1-yl)sulfonyl, (6-chloro-5-fluoro-1H-indol-1-yl)sulfonyl, (1H-pyrrol-1-yl)sulfonyl, (5-methoxy-1H-indol-1-yl)sulfonyl, (1H-pyrrolo[2,3-b]pyridin-1-yl)sulfonyl, (5-bromo-2,3-dihydro-1H-indol-1-yl)sulfonyl, (3,3-dimethyl-2,3-dihydro-1H-indol-1-yl)sulfonyl, (4-chlorophenyl)(methyl)amino]sulfonyl, benzylthio, methyl(pyridin-2-yl)amino]sulfonyl, (1H-indol-1-yl)sulfonyl, (pyrrolidin-1-yl)sulfonyl, (2-methylpyrrolidin-1-yl)sulfonyl, (morpholin-4-yl)sulfonyl, (piperidin-1-yl)sulfonyl, (methoxy-1H-indol-1-yl)sulfonyl, {methyl[(1R)-1-phenylethyl]amino}sulfonyl,

{methyl[(1S)-1-phenylethyl]amino}sulfonyl, [(2-aminophenyl)(methyl)amino]sulfonyl, (dipropylamino)sulfonyl, benzylsulfanyl, (dipropylamino)sulfanyl, (dipropylamino)sulfinyl, [4-chloro(methyl)anilino]sulfonyl, (phenylthio)methyl, benzyloxy, 3-(ethylthio), (pyridin-4-ylmethyl)thio, phenoxy, phenylthio, (pyridin-4-ylmethyl)thio, benzylthio, (1-phenylethyl)thio, cyclopentylthio, cyclopentylsulfinyl, benzoyl, hydroxy(phenyl)methyl, (methoxyimino)(phenyl)methyl, (hydroxyimino)(phenyl)methyl, cyclopentylcarbonyl, benzoylamino, furoylamino, (thien-2-ylacetyl)amino, (mesitylcarbonyl)amino, (1,3-benzodioxol-5-ylcarbonyl)amino, 3-(2,4-dimethoxybenzoyl)amino, (phenylthio)acetylamino, (anilinocarbonyl)amino, (2,4-difluorophenyl)amino carbonylamino, (3-cyanophenyl)aminocarbonylamino, (3-acetylphenyl)aminocarbonylamino, -(trifluoromethoxy)phenylsulfonylamino, (thien-2-ylacetyl)amino, (5-nitro-2-furoyl)amino, (5-chloro-2-methoxyphenyl)aminocarbonylamino, (4-phenoxyphenyl)aminocarbonylamino, (4-acetylphenyl)aminocarbonylamino, phenylethynyl, 2-phenylethyl, 4-Chlorophenyl, benzyloxy, phenoxy, alkylthio, phenyl, dihalophenyl, amino, acetylamino, benzoylamino, phenylacetylamino, methylsulfonylamino, phenylsulfonylamino, and benzylsulfonylamino.

35. The compound of claim 1, wherein $R_6$, is H, halo, -CN, $NH_2$, $NO_2$, methyl, methoxy, $-(CH_2)_2$-OH, morpholinyl, and $-(CH_2)_2$-O-CO-$CH_3$.

36. The compound of claim 1, wherein $R_1$ is 5-oxo-4,5-dihydro-1,2,4-oxadiazol-3-yl, 5-oxo-4,5-dihydro-1,3,4-oxadiazol-2-yl, methylsulfonylaminocarbonyl, 4-methylphenylsulfonylaminocarbonyl, 1H-tetraazol-5-yl, hydrazinocarbonylphenyl, 5-thioxo-4,5-dihydro-1,3,4-oxadiazol-2-yl, 1,1-dioxido-2H-1,2,4-benzothiadiazin-3-yl, 4-oxo-3,4-dihydroquinazolin-2-yl, amino(hydroxyimino)methyl, 2H-tetraazol-2-yl-methyl pivalate.

37. A method for sanitizing or disinfecting comprising administering an effective amount of the antibacterial compound of claim 1.